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## **Team Learning Activities: Reciprocal Learning through the Development of a Mediating Tool for Sustainable Learning**

**Purpose** – The purpose of this article is to show how a model for sustainable learning has been formed in the meetings between practitioners and researchers.

**Method** – With the point of departure in an interactive research approach, we have worked with learning and common knowledge development. Empirical data were collected from nine learning seminars, which we carried out within the framework of an EU project.

**Findings** – In the article we show by means of empirical examples from an ongoing EU project how the pedagogic method of learning seminars came to be a mediating tool for reciprocal learning between researchers, project leaders and project participants.

**Originality/value** – The learning seminars constituted an important part of a reflexive learning process where the learning consists of both practicable and theoretically anchored knowledge. Together with the project participants, we have developed a model for sustainable learning. This model consists of a reflection loop, which rests on four fundamental conditions; pedagogic leadership, the learning group, problem areas/situations and time aspects. The article fills a significant knowledge gap in terms of the development of learning within organizations.

**Keywords** – Learning, learning organizations, learning processes, reflection loop, model of sustainable learning

**Paper Type** – Research paper

### **Introduction**

This article discusses how common knowledge development has been built up within an EU project. The learning and the bringing back of knowledge are central matters in innovative and ground-breaking projects. Funding seems to be structured more around core project tasks and activities while team learning activities are considered accessories that some projects just cannot afford. The problem area of this study is focused on how the collected knowledge in a

project can come to use and lead to sustainable learning. The empirical data were collected during the two years that we were active as ongoing evaluators in an ongoing EU project where the purpose is to increase the accessibility for patients in health and medical care by means of information technology. Through changed working methods the patient should be able to receive support and assistance in other ways than through personal meetings without this jeopardizing good health care quality. Hopefully the article will contribute to the body of knowledge through valuable insights into how a structured learning process creates conditions for sustainable learning.

## **Previous Research**

Sustainable learning within organizations is today not much researched. Several studies describe the formalization of a reciprocal learning where the focus is on the exchange of experiences and critical reflection. Amundsdotter, for example, works with network groups in which the participants develop common knowledge through reflection of the gender characterization that they experience in their organizations of work (Amundsdotter, 2010). Other studies use the terms of reflection meetings, learning conversations and circular work for descriptions of learning in different group constellations (Gunnarsson & Westberg, 2008; Holmqvist, 2008; Härenstam, 2006). The concept of analysis seminar can be interpreted as a development of the reciprocal learning. In preparation of these seminars, the participants write work reports where they bring up problems that will form the basis for common reflection (Halvarsson & Öhman, 2008). In all these studies the common reflections of the group are emphasized as significant to the reciprocal learning. Research-based knowledge is, however, lacking in regard to how a conscious strategy provides conditions for structured learning.

## **Theoretical Points of Departure**

The common knowledge development that took place at the learning seminars was based on thoughts on learning, reflexive learning, the learning organization, the fact that learning takes place in a dialectic process and that knowledge develops through action. The theoretical points of departure given below have formed the basis for the learning and common knowledge development within the framework of the pedagogical method learning seminars.

The development-focused learning process in a project organization may, according to Dewey, be defined as a movement related to pragmatism. A learning process starts when the thought patterns that have been learnt cease to be sufficient, leading to the searching of new knowledge and new alternatives of acting. An individual's learning can also be understood from a common interest and striving towards a project goal (Dewey, 1933/1989). To the individual learning, Engeström's activity theory is added where the interest is directed at the learning at different levels within a project organization. It is, thus, not enough to use theories on individual learning. To obtain an understanding of the learning that takes place within a project, a socio-cultural perspective is also needed, in other words, the collective learning. (Engeström et al., 1999 a, b; Engeström, 2006).

According to Argyris and Schön, learning within organizations takes place at the transfer of new information – information that the organizations must handle and relate to. Learning can thus be a matter of knowledge and understanding as well as the activity of know-how. This presupposes that the organization gives possibilities for learning and that the organization culture, through a certain type of norms and basic assumptions, determines what type of knowledge the organization is open to. Argyris and Schön presume that it is the individuals within the organization that are open to new knowledge. The learning of an organization thus starts on the level of the individuals when they reflect upon something that they have experienced. When the individual communicates this experience-based knowledge internally within the organization, it becomes the basis for both individual and organizational learning (Argyris and Schön, 1996; Argyris, 1999).

The learning also comprises the learning process, which is described on the basis of how radical it is for the individual, the group or the organization. Argyris and Schön perceive two ways of learning, single-loop-learning and double-loop-learning. The first-mentioned way is a reproductive learning process where the goal of learning and the given framework within which this takes place are never questioned. (Argyris & Schön, 1978; Argyris & Schön, 1996). Argyris argues that single-loop-learning is unreflected and that it, in principle, dominates the work process and activities of the organization (Argyris, 1993).

Double-loop-learning arises when the conditions for the actions are questioned. This learning process implies a conscious, critical reflecting upon the goal for the learning process meaning that the individual together with others assess and evaluate choices and actions. Unlike single-

loop-learning, that arises when everyday job assignments need to be learned so that it becomes possible to take care of errors and unsystematic matters, double-loop-learning opens for insights into how norms and informal structures within the organization culture limit the learning and development of activities. The given information at double-loop-learning leads, in addition to a correction process, also to the formulating of questions and the discovery of new perspectives. This may lead to “unlearning” of earlier knowledge, attitudes and ideas. The outcome of double-loop-learning can be that insights and routines are changed and that the roles of the individuals and of the entire organization are questioned (Argyris & Schön, 1978; Argyris & Schön 1996).

The learning organization has among others been described by Senge, who says that for an organization to be successful it has to be a learning organization. Five disciplines are necessary for the development of the capacity for creativity and innovation. The fundamental of these disciplines is the fifth one, systems thinking, which contributes to the understanding of the totality and to the ability of seeing connections and influence processes between different phenomena. According to Senge, the individual has cemented ideas about the reality in which she/he lives, something that leads to a learning handicap with of difficulties to think and learn in a developing way as the consequence. For collective learning to take place within an organization, a consciousness about the individual learning handicaps is essential. An important step towards this consciousness is by Senge termed personal mastery. The individual then perceives the reality in an unprejudiced way, something that contributes to personal growth and new perspectives. This development in the individual is a condition of a learning organization as well as changed thinking models going from focus on special occurrences to be able to perceive causal connections. For learning to be realized in an organization, a common vision and team learning are also required. These two disciplines increase the feeling of belonging and play a decisive role for the development of the group's capacity to achieve results and strive towards the same goals (Senge, 1990).

Learning within organizations can also be described by means of dichotomous terms where the basic form is routinized and action-oriented. This form is found within already existing structures, norms and rules and regulations. According to this approach, learning is seen as a phenomenon based on a step-wise increase (cf Bateson, 1973; Fiol & Lyles, 1985; Senge, 1990; Fiol, 1994; Miner & Mezias, 1996; Argyris, 1999).

## **Methodology**

Interactive research is a developed and delimited form of action research. Characteristic of this type of research is that it is practically oriented and that change is seen as an integrated part of the research. The research is conducted as a cyclic process where the participants are central in the research from problem formulation to analysis and presentation of results. Action research is based on the hermeneutic knowledge ideal where a common-value system in the participants and researchers is emphasized. It also sets out from an overall understanding of problems and should lead to both practical problem solving and theory development. The interactive research requires that researchers and practitioners affirm each other's roles. A common knowledge occurs when a phenomena is understood from different perspectives. The separation of roles also means that that the researchers can establish distance to the actors that leads to a deeper reflection (Hansson, 2003; Denscombe, 2007).

With the point of departure in an interactive research approach, we have worked with learning and common knowledge development within the project SGF.<sup>1</sup> The interactive research approach is suitable when, as in our case, it is a matter of involving researchers and participants during the entire research process (cf. Svensson et al. 2007).

### ***Data Collection***

As researchers we adopted a collaborative role as an active part in relation to the participants and acted in the field of tension between closeness/distance, empirical data/theory and practice/academy. Closeness refers to doing research with the participants in the project while distance means a physical, social and mental distance, which makes possible reflection and the deepening of knowledge. Finding the balance between closeness and distance came to be a challenge. Acceptance of the project participants was, thus, important for us to have access to empirical data at the same time as distance in certain stages was seen as necessary for the practice to be understood from different perspectives. cf Svensson & Aagaard-Nielsen, 2006 a; Svensson & Aagaard-Nielsen, 2006 b; Westlander, 2006; Svensson et al. 2007).

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<sup>1</sup> Nurse Gudrun's Full-Scale Laboratory in Blekinge for IT in Nursing and Caring (SGF). SGF is funded by the European Regional Development Fund with a budget comprising 33 million Swedish Crowns. The project period is 2008 to 2011. The project should be seen as a framework within which common knowledge took place.

Through a systematic dialogue where reflection and the learning process were focused, an exchange of knowledge took place between us. Our overall understanding and theoretical knowledge in relation to the participants' view from within provided a reframing that made the knowledge formation deeper. An ambition was to obtain a close subject-subject relation, taking over the actor's perspective thoughts and reality. Dialogue and reflection then constituted important research methods (cf. Patton, 2002; Cohen et al. 2007; Denscombe, 2007).

During the second year of the project we have in a common learning process tried if a reflection loop could form the basis of developing sustainable learning in a project organization. Nine learning seminars were carried out with all eight project participants. In our study, a model for learning through experience (Moxness, 1984) has been used as a reflection loop, partly when the seminar participants wrote their reflection reports and partly as a pedagogic method at our learning seminars.

*Figure 1: Reflection loop*

The reflection loop consists of six steps where the first is the starting point for a learning process. Here it is a matter of identifying, delimiting and describing a concrete situation. By asking the question "what is happening?" the situation becomes manageable and the focus is directed at the course of events and change. Defining a problem in a new way gives conditions for profound learning. In the next step the concrete situation is observed, reflected upon and analyzed from the questions "why is this happening?" and "what does this mean?" To reflect upon a situation in this manner leads to new understanding of how cause and connection are coherent. Step three consists of abstraction, generalization and assessment of the concrete situation departing from the questions "what conclusions can be made?" and "what have I learnt?" Through an intellectual processing the different parts are analyzed and related to one another. Conclusions about what is specific and general in the situation are made at the same time as the thoughts and explanations of others are questioned. This part of the reflection loop can be seen as a step towards putting together the parts to a comprehensible whole. In step four, the situation is revised with new information as a basis. Working hypotheses are formed to, in the next step, be tested against reality. Questions that are actualized here are: How can I use what I have learnt? How can I learn from my mistakes and my successes? What do I do now? How can my own perspective be developed by means

of theory and analysis? It is not until an alternative solution has been tried in reality that it becomes applicable. In this step the interplay between learning and action is essential, something that requires one to perform concrete actions, experiment and, not least, reflect upon their outcome. In the concluding step the attention is directed at a new concrete situation (cf Argyris & Schön, 1978; Moxness, 1984; Argyris & Schön, 1996).

The purpose of learning seminars was to penetrate the project from the project participants' reflections. The participants prepared for each seminar by writing a reflection report and, based on the reflection loop described in above, they were encouraged to work at a chosen situation or phenomenon within the project which had generated experiences and action. The reflection reports were circulated in the group, which made it possible for researchers and participants to prepare and take part of the problem areas/situations that would be discussed at the seminar.

Our role as researchers at the learning seminars was to participate in the discussions that were carried on and to be permissive and have a sensitive ear. The research role further included putting words on a process and serve as a sounding board for how a strategy for sustainable learning could be built up within SGF. Our ambition was to problematize with the purpose of promoting reflection and new thinking in the seminar group (cf. Keating, Robinson & Clemson, 1996).

For our meetings to be forward-looking, commitment, an open climate and the will to learn from each other came to have vital importance. At the learning seminars we took on different roles. One of us was responsible for the documentation and concluding theoretical connection. The other researcher took up a more active role, which primarily was directed at arousing enthusiasm in the seminar participants as to their will and possibilities to deeper reflections and assessing of the described situation. Examples of questions posed to encourage the seminar participants to reflect upon their experiences and actions were: Is there anything in the situation that affected you especially? How did you handle the situation? How did you react when....? What do you mean when you say...? You said that..., what do you mean by that?

The interactive research approach made possible a continuous process where a common analysis of learning took place. The work of analysis can be seen as a bridge between



different actors where the participants' experiences and practitioner knowledge were joined with the researchers' pendulation between closeness and distance. This meant that we chose to take part of the participants' analysis process to then take distance during our own analysis and then again come close at the time of feedback.

## **The learning process**

In the following section we show how the learning process has been developed during the learning seminars. From the start the learning seminars had an open beginning and the participants themselves chose situations that they wanted to discuss. Lack of reporting, lack of information channels, insufficient technical support and the want of a functioning steering-group were recurrent problems that were analyzed in the group. When it comes to difficult decision paths one of the seminar participants brought up the fact that it was difficult to get clear information about which decisions had been made. The effect was, according to this seminar participant, that "the project loses speed and uncertainties arise as to which resources there are, what technology should be purchases and when tests may be begun" (seminar participant 1). The joint reflection led to new knowledge and revised actions. The group agreed on that the SGF steering-group must become more engaged and accountable. Further, the work with anchoring the project at the managerial level could be intensified, as would the implementation within nursing and care. On several occasions another seminar participant came back with a comment regarding the insufficient interest and commitment on part of the steering-group members, concerning steering the project ahead and giving support to the project when problems arose. She expressed her frustration like this: "As a matter of fact, the members have constituted a problem. The steering-group members' participation has in most cases been sporadic. Some have been replaced with the result that no anchoring in their activities has taken place" (seminar participant 3). The revised actions were, in this case, that the meetings of the steering-group were set up in a more long-term manner than earlier, so as to increase the members' conditions for participation. The group further agreed on having the project leader inform the project participants and steering-group members about the project status in a monthly letter. The description above of the learning seminars shows that the common reflection led to new solutions. Moreover, an ambition was to make visible oppositions and conflicts to the participants. This we tried to achieve through discussing interplay and actions between individuals within the project, and the oppositions that arise at social interaction. Bringing theoretical perspectives concerning power, organization structure

and organization culture into the project became useful tools for comprehension and explanation of these conflicts. In order to create conditions for deeper learning at subsequent seminars it was suggested that the reflection reports should be based on themes determined in advance. The seminar group agreed on four possible themes. These constituted examples of aspects that particularly had been assessed as problematic within SGF. IT support, horizontal criteria, the patient/citizen in the centre, and sustainable learning within the project, turned out to be the areas of discussion which the group agreed upon. At the learning seminar where IT support was the focus of our discussions, one seminar participant problematized the lack of support from the Information- and IT department. He called for assistance in creating technical solutions so that one of the sub-projects could become accessible to the public. The common reflection by the group resulted in laying down the fact that the technical resources were not sufficient. The revised action was to purchase IT support externally.

The horizontal criteria of equality, diversity and environment constituted the theme at one learning seminar. A general idea in the group was that it was difficult, in a reflection report, to describe a situation that concerned these criteria. At the same time several participants meant that the criteria were present implicitly in all the work that was carried out within the project. In the group there was an agreement about the necessity of new thinking and common reflection to make visible the work with the horizontal criteria. Learning then came to be about individual insights in regard to how the work in the project should be carried on. These insights led to several new ways of thinking and changes and also to individual knowledge being transformed into collective competence. A suggestion for change was to make each element of the horizontal criteria in the project visible in both the practical activities and the partial reports that were written each quarter. Another change was that the outcome of the horizontal criteria in each activity within the project began to be evaluated. By having the group put the activity results concerning the horizontal criteria under the magnifying glass, methods of working were discovered that lacked a feedback system and analysis. In the next step a way of thinking and a dialogue involving a thorough revision and an increased repertoire of actions were developed, that is, to not only react but also act with the purpose of affecting a situation or a course of events.

The seminar that treated the theme of the patient in the centre was focused on the project being opposed at different levels within the organization. Several reflection reports touched upon this and somebody considered that: "This leads to uncertainty and insufficient

possibility to attain increased accessibility and the placing of the patient in the centre” (seminar participant 1). Another seminar participant thought that: “The lack of IT support results in the project tending to become an IT project instead of a project that is of use to the patient” (seminar participant 4). The group considered that the reason for not placing the patient in the centre could be explained with the project struggling with oppositions at different levels. There was an overall opposition from the Information- and IT department. Another identifiable opposition was the inadequate anchoring of SGF within the activities where tests of image communication between care receiver/patient and caregiver would take place. The revised actions that were actualized at this seminar were that the steering-group needed to bridge over the insufficient communication between the Information- and IT department and SGF. The problem with insufficient anchoring could, according to the seminar group, be solved through regular meetings with caregivers with the purpose of deepening the dialogue about the development of IT-based nursing and health services. The group also thought that the personal meeting with representatives of the project would also contribute to playing down the fear of using new technology.

The theme of sustainable learning contained discussions on the significance of learning, for the project results to have long-term effects. When the seminar participants discussed how the reflection loop had been used somebody thought that it had been “an important tool for understanding the relation between cause and connection” (seminar participant 7). The time aspect was also brought out: “My understanding of the value of the reflection loop was not that great in the beginning. But when I compared the first reflection report with the one that I wrote in preparation of today’s seminar I understand how important it has been to my learning” (seminar participant 1). A first draft was worked out of a model, which would function as a model for sustainable learning.

The group emphasized the importance of the group, the time aspect and the pedagogic leadership but also agreed upon that the reflection loop was useful. The seminar was concluded by us anchoring the ideas of a model in a theoretical discussion around the learning process and learning within organizations.

## **Developing a model for sustainable learning**

The seminar participants' approach to learning led to the insight that learning seminars in the SGF could be seen as a mediating tool, that is, it provided conditions for questioning and reflection. The developing of the learning process above illustrates a way of working where seminar participants and researchers, through being active, produced their own knowledge. The common knowledge formation materialized when researchers and project participants in an interactive process created a model for sustainable learning which departed from the reflection loop. In this model four basic conditions for sustainable learning were shaped. These are the pedagogic leadership, a delimited problem area/situation, the learning group and time aspects. The researcher's theoretical approach deepened the understanding of these concepts.

*Figure 2: Model for sustainable learning.*

### ***Pedagogic leadership***

The pedagogic leadership is a prerequisite to develop a collective competence. The approach is that the human actively seeks knowledge, is creative, committed and questioning (cf Dewey, 1933/1989; Argyris & Schön, 1978; Argyris & Schön 1996; Engeström et al., 1999 a; Engeström et al., 1999 ).

The pedagogic leadership can also be related to the concept sustainability, that is, to protect and make use of given resources in a lasting way. The sustainable learning departs from a learning process that builds on the individual internalizing knowledge. Different pedagogic methods can be chosen, which aim at the project participants actively creating sustainable learning. Transferred to our study, the researchers had the process-leading role at the learning seminars, which involved creating a structure for the dialogue that was carried on at the same time as it was important to be supportive, inspiring and keep a sensitive ear. The shaping of a clear structure gains support by Cahill et al, who mean that the structure promotes both an exchange of experiences and a common knowledge development (cf Cahill et al., 2010).

There was, further, an ambition to problematize to promote reflection and new thinking in the seminar participants. This can be exemplified by the researcher's ambition to deepen the

understanding of interplay and conflicts that arise at social interaction. Another part of the structure was that the addition of theoretical reasoning on power, organizational structure and organization culture became useful tools for the understanding and explanation of these conflicts. The theoretical perspectives contributed valuable insights into how experiences may be made use of to create new understanding, which, in the end, leads to new alternatives of acting. Finding relevant theoretical angles of approach, thereby liberating the researcher from practice, became a challenge, which presupposed time and mental distance.

The pedagogic leadership was also about leading the project participants to both “reflection-in-action” and “reflection-on-action” and to make visible factual results (cf. Argyris & Schön, 1996; Argyris, 1999; Johansson, 2008). There was, in us as researchers, a consciousness of the fact that the learning seminars could develop into too much dialogue and too little action. Our experience was that the group already at an early stage tended to become more social than achievement-driven, a dilemma that brought to the fore thoughts on how development can be organized without becoming too controlling and restrictive for participation. A recurring pattern in the seminar participants was also that the seminar participants understood each learning seminar as a “concluded chapter” and not as a process where the solutions of problems discussed at the seminars could lead to provable actions. To confront this situation, each gathering was begun with feedback to revised actions in relation to the situations that had been described at the prior seminar. It was then important to call attention to the importance of carrying through activities and testing new solutions. As researchers we experienced that this feedback did not receive a direct outcome and that the seminar participants needed time to internalize this approach.

### ***The learning group***

In the learning group the actor appears as an individual, as part of a group and as part of society. The driving force within the learning group is the individual’s need of community and belonging. The most important element of the reciprocal processes is communication. It is constituted by an external process where the actor’s thoughts are materialized into words and an internal process where language creates thoughts. Reflection and analysis make up examples of the dialectics of the process. Language makes it possible for the actor to generalize the significance of the word and create understanding at an abstract level. The written language has its own function and structure and demands and has, therefore, a higher

level of abstraction than the spoken language (cf. Knutagård, 2003). Transferred to the learning seminars, the fundamental parts in the communication process were constituted by the dialogue and the written language in the reflection reports.

The learning seminar as pedagogic method made possible the development of a learning group where co-operation between individual knowledge and collective competence was strengthened. Furthermore, there arose in the group a capacity for seeing connections, the whole picture and influence processes between different phenomena (cf Senge, 1990; Fiol, 1994; Fiol & Lyles, 1985).

Trust between the seminar participants, security and an open constructive climate were by us seen as necessary conditions for the seminars to be forward-looking. The climate in the group was also characterized by a feeling of belonging and a common project identity. For the seminar participants, as part of the learning process, to dare give and receive constructive criticism, the shaping of a meeting culture that was based on socially equal relations became an important task.

### ***Delimited problem area/situation***

The third fundamental condition of the model for sustainable learning is the delimited problem area/situation and here we find a similarity to that which is termed case studies. Haigh means that the concept of case studies is not unambiguous. The common thing between our model and the case studies is that it is a matter of learning in a special context or activity. The purpose is to deepen learning within a profession with the basis in an exchange of experiences, but it can also mean to develop knowledge within a special discipline with the basis in the needs of working life (cf Haigh, 2008).

In regard to our study, the two first learning seminars had open beginnings, that is, the participants themselves chose situations that they wanted to discuss. Situation descriptions that concerned difficult decision paths, a lack of information channels, insufficient technical support and the lack of a functioning steering-group were recurrent problems that were analyzed in the group. Through common reflection, new solutions were sought. Our experiences of these introductory seminars were that the group had difficulties in deepening the learning, something that could be traced in the varying character of the problem areas/situations.

To create conditions for a deeper learning at the seven following seminars, it was therefore suggested that the reflection reports would be written on predetermined themes. The new direction of the learning seminars resulted in the fact that each seminar participant in her/his situation description treated the same complex of problems, resulting in a deepening of the collective learning.

### ***Time aspects***

The active learning where the personal, emotional and cognitive matters are in interplay presupposes that time is allocated for the process. Established time frames can, therefore, be seen as being part of a supporting structure (cf. Cahill et al, 2010).

Knowledge-making processes require dialogue in interplay with others, but also time for your own reflection. Resources concerning time must be allocated so that possibility is given both individual and the group for reflection on the actions. Sometimes, long periods of time and maturity are required to make reflection possible. Such reflection becomes something else than the immediate reflection (cf. Johansson, 2008). Transferred to the learning seminars, the time aspects for supporting learning were constituted by two parts. The first of them meant that time was allocated for proper reflection and writing of reflection reports and the other that three hours per month for the learning seminars was reserved. This time was organized so that each seminar participant described her/his thoughts and the revised actions to which the reflection had led. In the next step the group, through active dialogue and analysis, created its own knowledge, knowledge that was further deepened by adding theoretical perspectives and concepts.

### **Conclusions**

In this article we have shown the suitability of the interactive research approach, when the academy in a meaningful way works together with practitioners with the purpose of strengthening democratic knowledge processes. The approach strongly requires that the researcher adopts an attitude that invites dialogue, reflection and problem solving. The model for sustainable learning should be seen as the good example of how the learning group can

create a dialogue. In this group, exchange and development of practitioner-relevant and theory-generating knowledge became the central matters.

One of the most important conclusions from the study is that the four basic conditions for the learning process require a conscious approach. It must also be possible to turn pedagogic leadership into practical reality. This presupposes a view upon society with a dialectical relation between the individual and structure, a humanistic outlook on people and a view of learning as an active, creative process that leads to action. The pedagogic leadership also includes the role of facilitator and of functioning as a driving force for individual, collective and organizational learning. It is further a matter of creating an open climate where the learning group feels the wish to share its experiences – experiences which might even have entailed unsuccessful undertakings and failings. An analytical point is, however, that a too permissive and pleasant conversation atmosphere, that contains too much acknowledgement, may turn into an obstacle for questioning and critical thinking. Another concern is that the dialogue might get the upper hand at the expense of concrete actions and results within the project. This leads to an obstruction of the development, as the project requires activities, experiments and problem solving to be driven forward.

The article illustrates how a model for sustainable learning can be used to organize the learning process. Sustainable learning builds on systematic reflection and on the experiences of oneself or others and provides conditions for being able to make assessments and handle dilemmas. By using the model as a method of working and a tool for analysis, a balance was created between processes driven from below and steering from above. The results of the study contribute important knowledge about the learning group and a model that is applicable in different organizational settings. The importance of a pedagogic leadership is, furthermore, emphasized, something that should be of help to those who work with strategies for sustainable learning. The study also raises the research question of how a model for sustainable learning where the learning seminar is a mediating tool can promote a process of making visible and change within health and medical care.





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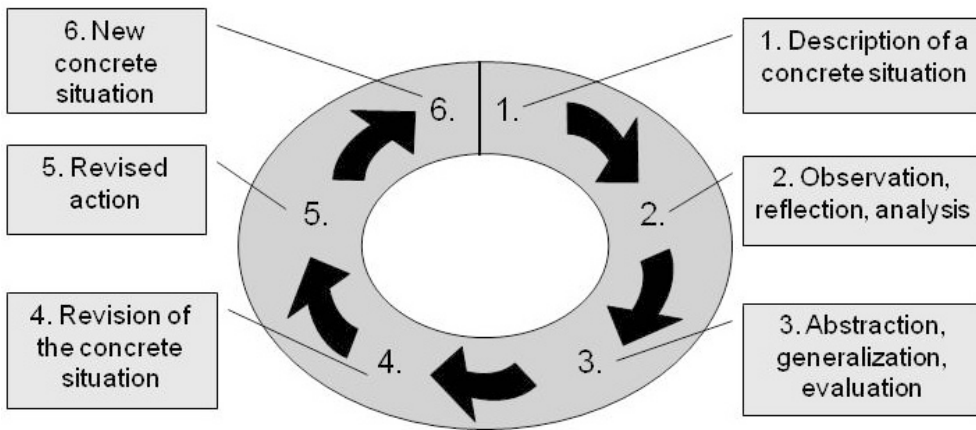


Figure 1: Reflection loop

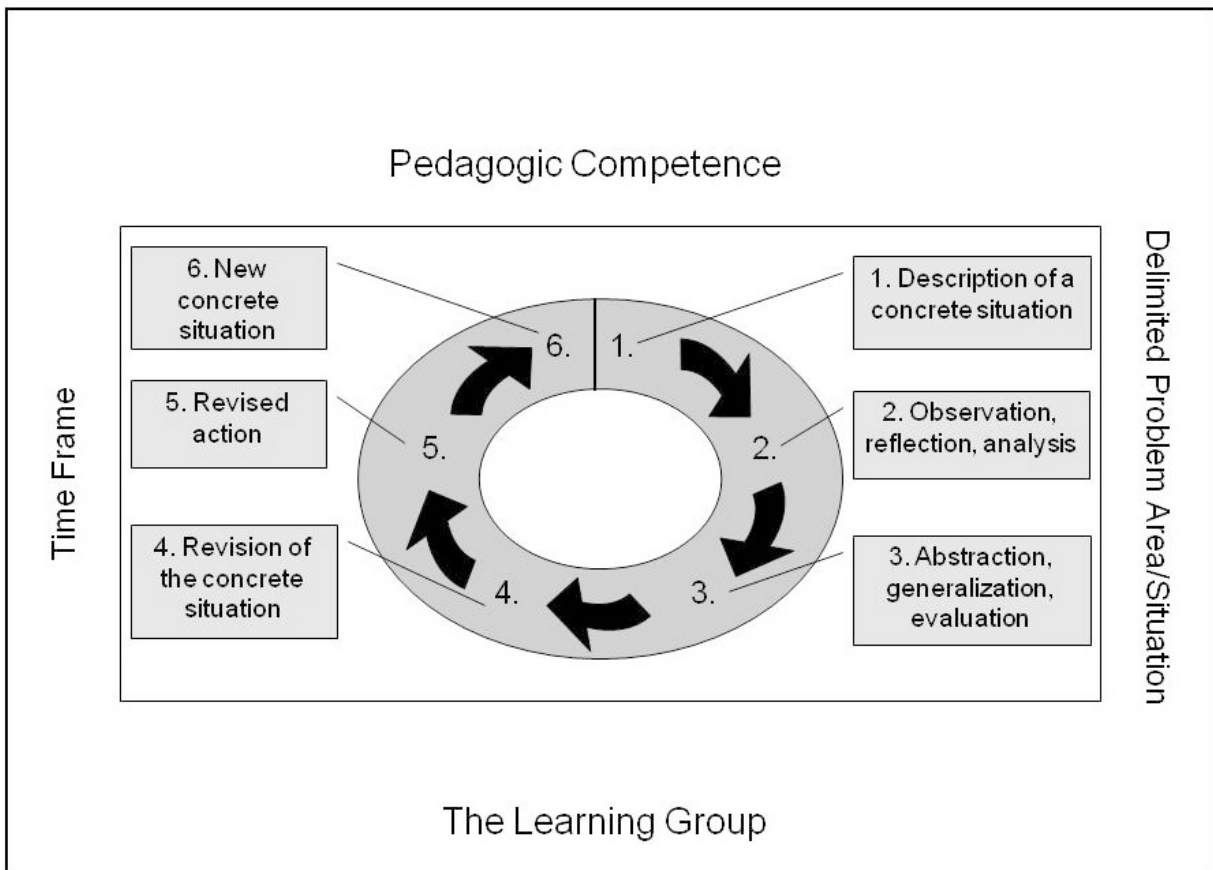


Figure 2: Model for sustainable learning